

Application No. 09/985,919
Amendment Dated October 10, 2003
Reply to Office Action of July 10, 2003

REMARKS

Claims 1-12 and 15-29 are pending in this application. By this Amendment, claims 13 and 14 are canceled without prejudice or disclaimer of the subject matter therein, the specification and claims 1-4, 7-10, 12, 15, 17-20 and 22-24 are amended, and claims 25-29 are added. The specification has been amended for clarification and contains no new matter. Support for new claims 25-29 can be found in the specification including the original claims and the figures, for example, see Figs. 7 and 8. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Applicant gratefully acknowledges the Office Action's indication that claims 14 and 15 define patentable subject matter. However, for at least the reasons set forth below, Applicant respectfully submits that all pending claims are in condition for allowance.

I. OBJECTIONS

The Office Action objects to the drawings and the specification. As to the drawings, Applicant respectfully submits that claim 12 has been amended to be consistent with Figs. 7 and 8, as Figs. 7 and 8 illustrate sustain periods as described in the Brief Description of the Drawings, page 13 of the specification. With respect to the specification, Applicant respectfully submits that the above amendments obviate the grounds for the objection. Withdrawal of the objection to the drawings and the specification is respectfully requested.

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II. 35 U.S.C. § 112, SECOND PARAGRAPH

The Office Action rejects claim 24 under 35 U.S.C. § 112, second paragraph. Applicant respectfully submits that the above amendments obviate the grounds for the rejection. Withdrawal of the rejection is respectfully requested.

III. 35 U.S.C. § 102(b)

The Office Action rejects claims 1-3, 7, 8, 12, 13 and 16-20 under 35 U.S.C. § 102(b) over Applicant's submitted related art. Since Applicant's submitted related art fails to disclose or suggest all the features of the claims, the rejection is respectfully traversed.

Applicant respectfully submits that Applicant's submitted related art merely discloses, as illustrated in Fig. 3, first and second trigger electrodes 34y, 34z and sustain electrodes 32y, 32z. However, Applicant's submitted related art fails to disclose or suggest, as recited in claim 1, at least the feature of first and second trigger electrodes formed between a scan/sustain electrode and a common sustain electrode, and a gap between the first trigger electrode and the scan/sustain electrode and a gap between the second trigger electrode and the common sustain electrode are smaller than a gap between the first trigger electrode and the second trigger electrode.

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Rather, Applicant's submitted related art disclose first and second trigger electrodes 34y, 34z closer to one another than to sustain electrodes 32y, 32z. As stated in Applicant's disclosure, page 5, paragraph 16, first and second trigger electrodes are formed at a center of a discharge cell. This causes, as disclosed in Applicant's disclosure on page 8 to page 9, paragraph 24, wall charges to be generated by a transition discharge and accumulated in a surface of sustain electrodes 12y, 12z, which in turn cause a reduction in luminance efficiency. By decreasing the distance between the trigger electrodes and the sustain electrodes and increasing the distance between the trigger electrodes, the transition discharge can be decreased and a strong discharge can be generated, therefore luminance and luminescent efficiency of a PDP can be improved. See Applicant's disclosure.

Furthermore, with respect to claim 7, Applicant's submitted related art fails to disclose or suggest at least the feature of first and second electrodes being formed with widths less than the widths of a scan/sustain electrode and a common sustain electrode, wherein the first and second trigger electrodes are each closer to their adjacent sustain electrode than another trigger electrode. See Applicant's disclosure, page 8.

With respect to claim 9, Applicant's submitted related art fails to disclose or suggest first and second trigger electrodes each closer to an adjacent sustain electrode than to the other trigger electrode. Rather, as illustrated in Fig. 3 of Applicant's submitted related art, the trigger

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electrodes 34y, 34z are closer to one another than to adjacent sustain electrodes 32y, 32z, respectively.

With respect to claim 12, Applicant respectfully submits that subject matter indicated to be allowable in claim 14 is incorporated into claim 12 for the sole purpose of expediting prosecution. Therefore, claim 12 defines patentable subject matter.

For at least the reasons set forth above, Applicant respectfully submits that claims 1, 7 and 12 are allowable. Claim 13 has been canceled without prejudice or disclaimer of the subject matter therein, therefore, the rejection of claim 13 is moot. Claims 2 and 3 depend from claim 1, claim 8 depends from claim 7, and claims 16-20 depend from claim 12, and are allowable for at least the same reasons, as well as their added features and the combinations thereof. Withdrawal of the rejection is respectfully requested.

IV. 35 U.S.C. § 102(e)

The Office Action rejects claims 1, 4-6 and 9-11 under 35 U.S.C. § 102(e) over Ha et al. (U.S. Patent No. 6,255,779, hereinafter Ha). Since Ha fails to disclose or suggest all the features of the claims, the rejection is respectfully traversed.

Applicant respectfully submits that Ha does not disclose or suggest any trigger electrode as recited in claims 1 and 9. Rather, Ha merely discloses, as illustrated in Fig. 5a, common and

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scan electrodes C,S which include an ITO electrode 17 and bus electrodes 18. See also Ha col. 4, lines 30-36.

Therefore, as Ha does not disclose or suggest at least the feature of trigger electrodes, Applicant respectfully submits that claims 1 and 9 are allowable. Claims 4-6 depend from claim 1, and claims 10 and 11 depend from claim 9, and are allowable for at least the same reasons, as well as their added features and the combinations thereof. Withdrawal of the rejection is respectfully requested.

V. 35 U.S.C. § 103(a)

A. Claims 21, 23 and 24

The Office Action rejects claims 21, 23 and 24 under 35 U.S.C. § 103(a) over Applicant's submitted related art. Since Applicant's submitted related art fails to disclose or suggest all the features of the claims, the rejection is respectfully traversed.

The Office Action states on page 5, item 9, that Applicant's submitted related art does not explicitly disclose the differences among their distances between electrodes as claimed but rather, "it would have been an obvious matter of design choice leaving a specific distant arrangement among the electrodes up to designer for a particular application." However, Applicant submits that it is not an obvious matter of design choice about the distance between

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electrodes for particular applications and that such implementation is not “routine skill in the art for optimum performance of the plasma image.”

As stated on page 15 of Applicant’s disclosure in the related art PDP of Fig. 3, first and second trigger electrodes 34y and 34z are formed at a center of an upper substrate 30. On the other hand, in the claimed invention, first and second trigger electrodes 54y and 54z, as illustrated in Fig. 6, are located adjacent to sustain electrodes 52y and 52z in order to allow a sustain discharge to be generated by a trigger discharge only during the sustain period. See page 24 of Applicant’s disclosure. Therefore, it is not an obvious matter of design choice nor is it routine skill in the art to optimize.

Similarly, claim 23 also recites distance relations between electrodes for the claimed invention, which are also not disclosed or suggested by Applicant’s submitted related art.

For at least the reasons set forth above, Applicant respectfully submits that claims 21 and 23 are allowable. Claim 24 depends from claim 23, and is allowable for at least the same reasons, as well as its added features and the combination thereof. Withdrawal of the rejection is respectfully requested.

B. Claim 22

The Office Action rejects claim 22 under 35 U.S.C. § 103(a) over Ha. The rejection is respectfully traversed.

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Applicant respectfully submits that for the reasons discussed above with respect to claims 1, 4-6 and 9-11, Ha fails to disclose or suggest at least the feature of first and second trigger electrodes.

For at least the reasons set forth above, Applicant respectfully submits that claim 22 is allowable. Withdrawal of the rejection is respectfully requested.

VI. New Claims

By this Amendment, claims 25-29 are added to the application. Claims 25-29 broadly recite features of the preferred embodiment(s). It is respectfully submitted that the new claims are allowable over the references of record for at least the reasons discussed above in connection with claims 1-12 and 15-24.

CONCLUSION

Applicant respectfully submits that at least claim 21 has not been amended, therefore should a new reference be applied to at least claim 21, Applicant respectfully submits that any future Office Action be made non-final.

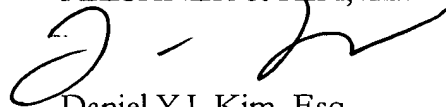
In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes

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would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Laura L. Lee, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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Date: October 10, 2003